

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,619	04/02/2004	Kia Silverbrook	HYG014US	2058
24011	7590 10/23/2006		EXAMINER	
SILVERBROOK RESEARCH PTY LTD			KIM, TAE W	
393 DARLIN			ARTIBUT	PAPER NUMBER
BALMAIN,	BALMAIN, NSW 2041		ART UNIT	PAPER NUMBER
AUSTRALIA			2876	
			DATE MAIL ED: 10/22/2006	

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/815,619	SILVERBROOK			
Office Action Summary		Examiner	Art Unit			
		Tae W. Kim	2876			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION B6(a). In no event, however, may a reply be time rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	l. the mailing date of this communication. (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 28 Au	<u>ıgust 2006</u> .				
.—	This action is FINAL . 2b) ☑ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1-11 and 15-44 is/are pending in the additional day of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-11,15-44 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.				
Applicati	on Papers					
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>02 April 2004</u> is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	☑ accepted or b) ☐ objected to lead accepted or b) ☐ objected to lead and accepted by acception is required if the drawing(s) is objection is required in the drawing (s) is objected to lead accepted to lead	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority u	ınder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
2) Notice 3) Information	t(s) se of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

Art Unit: 2876

DETAILED ACTION

Response to Amendment

1. Receipt is acknowledged of the Amendment filed on August 28, 2006.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claim(s) 1-11, 15-17, 19, 25, 27, 28, 30-35, 37, and 43 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Gogulski (US 4071740) in view of Chambers (US 4881061).

Re claim 1: Gogulski discloses a shopping receptacle (fig 1 part 22), having a shopping receptacle identity (col 7 lines 56-58), for receiving and retaining a product item having an interface surface associated therewith, the interface surface having disposed thereon or therein first coded data including a plurality of coded data portions, each coded data portion being indicative of an identity of the product item (col 5 lines 27-35), wherein the receptacle comprises:

- (a) a receptacle body adapted to receive and retain the product item and having an opening through which the product item may be placed within the receptacle body (fig 1 part 22);
- (b) a sensing device adapted to:

sense at least some of the first coded data on the interface surface of the product item as the product item is placed within the receptacle body (fig 1 parts 26 & 46), and generate indicating data indicative of the identity of the product item (col 5 lines 27-35 & 51-54, col 6 lines 2-16); and,

- (c) a weighing device for sensing the weight of the product item (figs 1 & 2 part 24), and generating weight data indicative of the sensed weight, the weight data; and
- (d) means for transferring the indicating data, the weight data and receptacle identity data to a computer system (fig 3 part 66) which (col 5 lines 51-59, col 6 lines 24-33):
 - (i) determines, using the indicating data, an indicated weight of the product item in accordance with weight indications stored in a data store (col 6 lines 14-16 & 24-33);
 - (ii) compares the indicated weight to the sensed weight (col 6 lines 24-33); and,
 - (iii) is responsive to the comparison (col 6 lines 33-55).

However, Gogulski does not disclose or fairly suggest

a sensing device having an optical sensor, said sensing device being adapted to: sense, using the optical sensor, second coded data on a user identity card, said second

coded data being indicative of a user identity,

sense, using the optical sensor, at least some of the first coded data on the interface surface of the product item,

generate user identity data, and

means for transferring the user identity data to a computer system.

Chambers however discloses

a sensing device having an optical sensor (fig 6 part 530), said sensing device being adapted to:

Art Unit: 2876

sense, using the optical sensor, second coded data on a user identity card, said second coded data being indicative of a user identity (col 9 lines 41-51), sense, using the optical sensor, at least some of the first coded data on the interface

surface of the product item (col 9 lines 41-51),

generate user identity data, and

means for transferring the user identity data to a computer system (fig 6, col 4 lines 16-22, col 9 lines 41-51).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Chamber's sensing device to Gogulski's shopping receptacle for the purpose of providing individualized service such as discounting prices or promoting items based on the individual shopper's purchase history. Chamber's sensing device can read both the product identifying information and the customer identifying information.

Re claims 2 and 28: Gogulski as modified by Chambers discloses the receptacle of claim 1 and the method of claim 27, wherein the computer system generates and the action includes an alert in response to an unequal comparison (col 6 lines 33-55).

Re claim 3: Gogulski as modified by Chambers discloses the receptacle of claim 1, wherein the receptacle includes a user interface and wherein an indication of the results of the comparison is provided via the user interface (fig 1 parts 12 & 54, col 6 lines 33-55).

Re claims 4 and 31: Gogulski as modified by Chambers discloses the receptacle of claim 1 and the method of claim 27, wherein the receptacle includes the computer system (fig 1 part 12, col 6 lines 28-33).

Art Unit: 2876

Re claims 5 and 32: Gogulski as modified by Chambers discloses the receptacle of claim 1 and the method of claim 27, wherein the receptacle includes a communications means for communicating with the computer system (col 5 lines 55-59, col 7 lines 23-29).

Re claims 6 and 33: Gogulski as modified by Chambers discloses the receptacle of claim 1 and the method of claim 27, wherein the computer system and wherein the method includes, in the computer system:

- (a) determines, using the indicating data, type data indicative of a type of the product item (col 6 lines 14-16); and,
- (b) determines, using the type data, the indicated weight of the product item (col 6 lines 28-33).

Re claim 7: Gogulski as modified by Chambers discloses the receptacle of claim 1, wherein the sensing device comprises:

- (a) a laser for emitting the at least one sensing beam, the sensing beam being directed in first and second orthogonal directions to thereby generate a raster scan pattern over a sensing patch, the sensing patch being provided in the sensing region such that it exposes at least one coded data portion (col 6 lines 4-11);
- (b) a sensor for sensing the at least one exposed coded data portion (col 6 lines 12-14); and
- (c) a processor for determining, using at least some of the sensed coded data, indicating data indicative of the identity of the product item (col 6 lines 14-16).

Re claim 8: Gogulski as modified by Chambers discloses the receptacle of claim 1, wherein the computer system is adapted to:

(a) determine, using the indicating data, product information (col 6 lines 14-16 & 28-33); and,

(b) transfer the product information to a user interface, the user interface being responsive to the product information to display the product information (col 5 line 50 – col 6 line 1,col 6 lines 20-24).

Re claim 9: Gogulski as modified by Chambers discloses the receptacle of claim 8, wherein the computer system is adapted to, using the indicating data, add an indication of the product item to a product item list (fig 1 parts 30 & 50, col 5 lines 35-38, col 6 lines 20-24, col 10 lines 5-11).

Re claim 10: Gogulski as modified by Chambers discloses the receptacle of claim 8, wherein the computer system is adapted to, using the indicating data, provide the product item list to the user via the user interface (fig 1 parts 30 & 50, col 5 lines 35-38, col 6 lines 20-24, col 10 lines 5-11).

Re claim 11: Gogulski as modified by Chambers discloses the receptacle of claim 1, wherein the computer is adapted to:

- (a) associate the sensing device with a user using the user identity and the shopping receptacle identity data (col 2 lines 52-58: Reference indicated that the association of the sensing device and user is established.); and,
- (b) dissociate the sensing device and a user using the user identity and the shopping receptacle identity data (col 3 lines 20-30).

Re claim 15: Gogulski as modified by Chambers discloses the receptacle of claim 1, wherein the receptacle is at least one of:

(a) a shopping trolley;

Art Unit: 2876

(b) a shopping cart (fig 1); and,

(c) a shopping basket.

Re claims 16 and 35: Gogulski as modified by Chambers discloses the receptacle of claim 1 and the method of claim 27, wherein the receptacle is adapted to perform and the action includes at least one of:

(a) provide product information about the product item to the user (col 5 line 50 – col 6 line 1, col 6 lines 20-24, col 6 lines 28-33);

(b) record a purchase transaction indicating that the user has purchased the product item;

(c) record a potential purchase transaction indicating that the user wishes to purchase the product item;

(d) provide comparison information to the user, the comparison information comparing product information about the product item with product information about another product item;

(e) play a game associated with the product item; and

(f) conduct a competition in relation to the product item.

Re claims 17 and 34: Gogulski as modified by Chambers discloses the receptacle of claim 1 and the method of claim 27, wherein the receptacle is adapted to display and the action includes displaying information relating to any one of the products:

(a) cost (col 5 line 50 – col 6 line 1, col 6 lines 20-24);

(b) contents;

(c) weight (col 5 line 50 – col 6 line 1, col 6 lines 28-33);

(d) place of origin;

(e) manufacturer;

(f) date of manufacture;

Art Unit: 2876

(g) date of packaging;

(h) use-by date;

(i) current owner; and

(j) dimensions.

Re claims 19 and 37: Gogulski as modified by Chambers discloses the receptacle of claim 1 and the method of claim 27, wherein the coded data distinguishes the product item from every other product item (col 6 lines 14-16).

Re claims 25 and 43: Gogulski as modified by Chambers discloses the receptacle of claim 1 and the method of claim 27, wherein the interface surface is at least a portion of at least one of:

(a) product item packaging (col 6 lines 10-11);

(b) product item labeling (col 5 lines 27-30);

(c) product manuals;

(d) product instructions; and,

(e) a surface of the product item.

Re claim 27: Gogulski discloses a method of facilitating interaction between a user and a computer system using a shopping receptacle, having shopping receptacle identity (col 7 lines 56-58), adapted to receive and retain a product item (fig 1 part 22), the product item having an interface surface associated therewith, the interface surface having disposed thereon or therein first coded data including a plurality of coded data portions, each coded data portion being indicative of the identity of the product item (col 5 lines 27-35), wherein the method includes:

(b) transferring shopping receptacle identity data to a computer system, which initiated a shopping session:

Art Unit: 2876

(c) receiving a product item in a receptacle body, the receptacle body having an opening through which the product item may be placed within the receptacle body (fig 1 part 22);

- (d) in the sensing device (fig 1 parts 26 & 46):
 - (i) sensing at least some of the coded data on the interface surface of the product item as the product item is placed within the receptacle body (col 5 lines 27-35, col 6 lines 2-16); and,
 - (ii) determining indicating data indicative of the identity of the product item (col 6 lines 14-16); and,
- (e) in a weighing device (figs 1 & 2 part 24):
 - (i) sensing the weight of the product item (col 6 lines 24-33); and,
 - (ii) generating weight data indicative of the sensed weight,
- (f) transferring the weight data and the product item identity being provided to a computer system (col 6 lines 14-16 & 24-33) which:
 - (1) determines, using the indicating data, an indicated weight of the product item in accordance with weight indications stored in a data store (col 6 lines 24-33);
 - (2) compares the indicated weight to the sensed weight (col 6 lines 24-33); and,
 - (3) is responsive to the comparison to perform an action (col 6 lines 33-55).

However, Gogulski does not disclose or fairly suggest steps comprising

- (a) in a sensing device:
 - (i) sensing, using the optical sensor, second coded data on a user identity card, said second coded data being indicative of a user identity, and
 - (ii) generating user identity data:

Art Unit: 2876

(b) transferring the user identity data and shopping receptacle identity data to a computer system, which initiates a shopping session;

- d) in the sensing device:
 - i) sensing, using the optical sensor, at least some of the first coded data.

Chambers however discloses steps comprising

- (a) in a sensing device:
 - (i) sensing, using the optical sensor (fig 6 part 530), second coded data on a user identity card, said second coded data being indicative of a user identity (col 9 lines 41-51), and
 - (ii) generating user identity data:
- (b) transferring the user identity data and shopping receptacle identity data to a computer system, which initiates a shopping session (fig 6, col 4 lines 16-22, col 9 lines 41-51);
- (d) in the sensing device:
 - (i) sensing, using the optical sensor, at least some of the first coded data (col 9 lines 41-51).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Chamber's steps comprising sensing device and transferring the user identity data to Gogulski's method for the purpose of providing individualized service such as discounting prices or promoting items based on the individual shopper's purchase history.

Re claim 30: Gogulski as modified by Chambers discloses the method of claim 27, wherein the receptacle includes a user interface, and wherein the action includes providing an indication of the results of the comparison via the user interface (col 6 lines 33-55).

Art Unit: 2876

4. Claim(s) 18 and 36 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Gogulski (US 4071740) as modified by Chambers (US 4881061) in view of Reade (US 20040103034).

Re claims 18 and 36: Gogulski as modified by Chambers discloses the receptacle of claim 1 and the method of claim 27.

However, Gogulski as modified by Chambers does not disclose or fairly suggests that the first coded data is indicative of an EPC associated with the product item.

Reade however discloses the first coded data indicative of an EPC associated with the product item (par. 0013, 0039).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Reade's teaching that the first coded data is indicative of an EPC associated with the product item to the receptacle and method of Gogulski as modified by Chambers for the purpose of being able to track the product.

5. Claim(s) 20, 21, 38 and 39 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Gogulski (US 4071740) as modified by Chambers (US 4881061) in view of Manasse (US 20040117718).

Re claims 20, 21, 38 and 39: Gogulski as modified by Chambers discloses the receptacle of claim 1 and the method of claim 27.

However, Gogulski as modified by Chambers does not disclose or fairly suggests that the first coded data is redundantly encoded using Reed-Solomon encoding.

Art Unit: 2876

Manasse however discloses that the first coded data is redundantly encoded using Reed-Solomon encoding (abs., par. 0009, 0002, 0004, 0007-0015, 0019-0022, 0025, 0031, 0063, 0065, 0074).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Manasse's teaching that the first coded data is redundantly encoded using Reed-Solomon encoding to the receptacle and method of Gogulski as modified by Chambers for the advantage of using Reed-Solomon codes that the probability of an error remaining in the decoded data is usually lower than the probability of an error if Reed-Solomon is not used.

6. Claim(s) 22-24, 26, 40-42, and 44 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Gogulski (US 4071740) as modified by Chambers (US 4881061) in view of Dougherty (US 6076734).

Re claims 22, 23, 40 and 41: Gogulski as modified by Chambers discloses the receptacle of claim 1 and the method of claim 27.

However, Gogulski as modified by Chambers does not disclose or fairly suggests that the first coded data is substantially invisible to the unaided eye and wherein the first coded data is printed using infrared ink.

Dougherty however discloses that the first coded data is substantially invisible to the unaided eye (col 5 lines 32-40, col 9 lines 33-36) and wherein the first coded data is printed using infrared ink (col 2 lines 59-64, col 4 lines 18-23, col 5 lines 32-58, col 10 lines 39-45).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Dougherty's teaching that the first coded data is

Art Unit: 2876

substantially invisible to the unaided eye and wherein the first coded data is printed using infrared ink to the receptacle and method of Gogulski as modified by Chambers for the purpose of ensuring that the coded data is protected from unauthorized reading.

Re claims 24 and 42: Gogulski as modified by Chambers discloses the receptacle of claim 1 and the method of claim 27, wherein the first coded data is provided on the interface surface representing at least one of:

(a) product information; and,

(b) the identity of the product item (col 1 lines 22-57, col 5 line 3 – col 6 line 55).

However, Gogulski as modified by Chambers does not disclose or fairly suggests the visible markings coincident with the first coded data provided on the interface surface.

Dougherty however discloses the visible markings coincident with the first coded data provided on the interface surface (fig 1 parts 32 & 34, col 2 lines 43-58, col 5 lines 48-62).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Dougherty's visible markings coincident with first coded data provided on the interface surface to receptacle and method of Gogulski as modified by Chambers for the purpose of providing visual information about the encoded data.

Re claims 26 and 44: Gogulski as modified by Chambers discloses the receptacle of claim 1 and the method of claim 27.

However, Gogulski as modified by Chambers does not disclose or fairly suggests that the first coded data is disposed over at least one of:

- (a) substantially all of any one of:
 - (i) an entire product surface;
 - (ii) packaging; and,

Application/Control Number: 10/815,619 Art Unit: 2876 (iii) a product label; (b) more than 25% of any one of: (i) an entire product surface; (ii) packaging; and, (iii) a product label; (c) more than 50% of any one of: (i) an entire product surface; (ii) packaging; and, (iii) a product label; (d) more than 75% of any one of: (i) an entire product surface; (ii) packaging; and, (iii) a product label. Dougherty however discloses that the first coded data (fig 10 parts 358, 360, & 362) is disposed over at least one of: (a) substantially all of any one of: (i) an entire product surface (fig 10 part 352, col 11 25-43); (ii) packaging; and, (iii) a product label; (b) more than 25% of any one of: (i) an entire product surface; (ii) packaging; and, (iii) a product label;

(c) more than 50% of any one of:

- (i) an entire product surface;
- (ii) packaging; and,
- (iii) a product label;
- (d) more than 75% of any one of:
 - (i) an entire product surface;
 - (ii) packaging; and,
 - (iii) a product label.

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Dougherty's teaching that the first coded data is disposed over substantially an entire product surface to the receptacle and method of Gogulski as modified by Chambers for the purpose of increasing the volume of information content of the coded data.

7. Claim(s) 29 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Gogulski (US 4071740) as modified by Chambers (US 4881061) in view of Schlieffers (US 20040111320).

Re claim 29: Gogulski as modified by Chambers discloses the method of claim 28.

However, Gogulski as modified by Chambers does not disclose or fairly suggests that the method includes providing the alert at a location remote to the receptacle.

Schlieffers however discloses that the method includes providing the alert at a location remote to the receptacle (par. 0066).

Art Unit: 2876

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate Schlieffers' teaching that the method includes providing the alert at a location remote to the receptacle to the method of Gogulski as modified by Chambers for the purpose of informing the control persons remotely located.

Response to Arguments

8. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Gogulski reference in combination with Chambers reference teaches a shopping receptacle having all of the features specified in claim 1 and a method having all of the steps specified in claim 27. Furthermore, the sensing device in Chambers reference is adapted to sense first coded data on product items and sense second coded data on a user identity card.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae W. Kim whose telephone number is 571-272-5971. The examiner can normally be reached on Mon-Fri 7AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2876

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tae W. Kim

Art Unit 2876

Patent Examiner

TWK

MICHAEL G. LEE SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800

Page 17